STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:) Docket HWCA 98/99-400
)
United States Navy)
Public Works Center) CONSENT ORDER
Naval Air Station, North Island)
2730 McKean Street Suite 1)
San Diego, California 92136-5294) Health and Safety Code
) Section 25187
EPA ID No. CA7170090016)
)
Respondent.)
)

The State Department of Toxic Substances Control (Department) and the United States Navy, (Respondent) enter into this Consent Order and agree as follows:

- 1. Respondent owns and/or operates a military base designated as Naval Air Station, North Island (NASNI), within which is located the Public Works Center (Facility), a formerly operational interim status hazardous waste management facility, where Respondent generated, handled, treated, and stored hazardous waste at the surface impoundments and ancillary equipment [Hazardous Waste Management Units (HWMUs)] for the Industrial Waste Treatment Plant and the Oily Waste Treatment Plant (Site 11) located East and North of the runways in the center of NASNI.
- 2. The Department conducted an Operation and Maintenance Inspection on the groundwater monitoring system installed pursuant to the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq., "RCRA") for the Site 11 RCRA Surface Impoundments on March 25-27 and April 1, 1998.

- 3. Based on the inspection, the Department alleges the following violations:
- 3.1. The Department alleges Respondent violated Title 22, California Code of Regulations section 66265.91(b)¹, in that during the years 1995, 1996, and 1997, Respondent failed to follow a water quality sampling and analysis plan that complies with California Code of Regulations, title 22, division 4.5, chapter 15, article 6. Specifically, the Department alleges that Respondent failed to implement the requirement contained in the Water Quality Sampling Analysis Plan dated May 28, 1993 (hereinafter "1993 WQSAP") and revision letter dated April 10, 1996, which mandates specific sampling requirement for 17 wells designated as: MW-3, MW-5, MW-5D, MW-6, MW-8, MW-8D, MW-9, MW-11, MW-15, MW-17, MW-22, MW-23, MW-24, MW-25, MW-28, MW-30, and MW-31 based on the following facts:
 - 3.1.1. In 1995, Respondent did not undertake the following activities:
- a. quarterly sampling for the second quarter (Q2), third quarter (Q3), and fourth quarter (Q4), in all 17 wells selected for quarterly monitoring as described in Table 3 of the 1993 WQSAP for the following constituents: As, Cd, Cr, Cr⁺⁶, Pb, Hg, Ni, Se, Ag, Tl, Zn, B, CN, and VOCs (referred to as the "A" List);
- b. annual and/or quarterly sampling for specific constituents (referred to as "B List") at specific wells as follows: quarterly samples during Q2, Q3, and Q4 for SVOCs in MW-5, MW-6, MW-9, and MW-31; and quarterly samples during Q2, Q3, and Q4 (as described in the 1993 WQSAP Table 3, Group D) for Cu, Co, Mo, Sn, in MW-30;

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¹ All regulatory references shall be to Title 22 of the California Code of Regulations unless otherwise indicated.

- c. field measurements for all wells in Q2, Q3, Q4 as described in 1993 WQSAP Section 5.3.2. (Page 8); and
- d. measurement of depth to water (DTW) for wells MW-1 through MW-6, MW-8 through MW-11, MW-14, MW-15, MW-17, MW-24 through MW-32, MW-5D, MW-8D, MW-22, and MW-23 (from the 1993 WQSAP).
- 3.1.2. In 1996 Respondent did not undertake the following activities: 1) during Q3, sample for the following constituents in all sampling wells: 1) bicarbonate (HCO), Sulfate (SO4), Nitrates, Total Dissolved Solids (TDS): 2) during Q1, sample for the full list of Constituents of Concern in all sampling wells as set forth in the 1993 WQSAP Table 2 and the April 10, 1996, revision letter, and, 3) during Q3, sample for VOCs in well MW-6.
 - 3.1.3. In 1997, Respondent did not undertake the following activities:
- a. sample for the following constituents in all sampling wells: Cr⁺⁶, Fe, and Mn in Q1; HCO₃, SO₄, Nitrates, and TDS in Q3;
- b. sample MW-6 and MW-25 for Sb, Ag, As, Ba, Be, Cd, Cr, Cr⁺⁶, Fe, Hg, Mn, Ni, Pb, Se, Tl, V, Zn, B, Na, Ca, K, Mg, Cl, CN, and all Constituents of Concern during Q1;
 - c. sample MW-27 for SVOCs annually.
- 3.2. The Department alleges that Respondent violated section 66265.91, subdivision (b), and section 66265.97, subdivision (e)(4), in that throughout 1996 and 1997, Respondent failed to follow a water quality sampling and analysis plan that provided a reliable indication of water quality and that otherwise complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, based upon the following facts:

- 3.2.1. Respondent did not for two years (except Q1 of 1996) measure and record field parameters, in the manner described in the 1993 WQSAP, Appendix D, Sections 6.2 and 6.3, pages 7 and 8, and Appendix D, Section 6.5, page 9;
- 3.2.2. Respondent did not extract/purge the minimum amount of groundwater in the manner described in the 1993 WQSAP, Appendix D, Sections 6.2, and 6.5, pages 7 to 10 (see Appendices A and J of the Inspection Report); and
- 3.3. The Department alleges that Respondent violated section 66265.97, subdivisions (b)(1)(B)(3) and (b)(1)(C)(2), in that, throughout the years 1996 and 1997, the Respondent failed to include a sufficient number of background monitoring points at appropriate locations to provide the data needed to evaluate changes in water quality due to the release from the regulated unit. To wit, the Respondent failed to include a background well for detection and evaluation monitoring to assess releases from HWMUs. This allegation is based on the following fact: Monitoring well MW-30 was no explicitly identified as the background well in the April 10, 1996 WQSAP revision letter while monitoring well MW-27 is a downgradient well and was situated within the volatile organic compound (VOC) plume in 1995, 1996 and 1997.
- 3.4. The Department alleges that Respondent violated section 66265.97, subdivision (b)(5), in that on or about March 31, 1998, the Respondent failed to appropriately screen and fit a filter pack to the sampling interval of each monitoring well to enable collection of representative groundwater samples. This allegation is based on the following fact: the Respondent collected groundwater samples containing sediment from monitoring well MW-5. The Department contends that the presence of sediment in the sampling containers may adversely affect analytical groundwater results.

- 3.5. The Department alleges that Respondent violated section 66265.91, subdivision (b) and section 66265.99, subdivision (e)(4), in that during the month of June 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulation, title 22, division 4.5, chapter 15, article 6, by not periodically monitoring for all constituents of concern specified in the 1993 WQSAP and evaluating changes in water quality. This allegation is based on the following facts: Respondent did not monitor, at least once every five years, all constituents of concern specified in Table 2 of the 1993 WQSAP for well MW-30 (changed to MW-27 in 1996) and wells MW-5, MW-6, MW-9, and MW-31. Additionally, the Respondent did not discuss and evaluate the periodically collected data, graphs and trends of contaminant concentrations.
- 3.6. The Department alleges that Respondent violated section 66265.99, subdivision (e)(6), in that, throughout the years 1995, 1996, and 1997, the Respondent failed to analyze samples from all monitoring points for all constituents contained in Appendix IX to Chapter 14 of the 1993 WQSAP, at least annually, to determine whether additional hazardous constituents are present. This allegation is based upon the following fact(s): The Respondent did not sample for Appendix IX constituents in the 1995, 1996, and 1997 quarterly groundwater monitoring events. Moreover, Appendix IX tables are not included with the 1995, 1996, and 1997 Annual Reports.
- 3.7. The Department alleges that Respondent violated section 66265.91, subdivision (b), in that, from March 26, 1998 to March 31, 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6. This allegation is based upon the following facts: Monitoring well MW-6 was no sampled and a water level was not collected as scheduled in the 1993 WQSAP (April 10, 1996 revision letter), Table 1-Sampling Schedule (Appendix A). The Respondent also did not submit all

revisions of the 1993 WQSAP to DTSC and maintain a current version of the 1993 WQSAP in the operating record at the Facility. Well 11-GW-3 was used in place of well MW-6.

- 3.8. The Department alleges that Respondent violated section 66265.91, subdivision (b), in that during 1995, 1996, and 1997, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, by failing to evaluate vertical gradients as required by the 1993 WQSAP, Section 5.3.2, page 9 and Section 5.8.2, page 19. This allegation is based on the following fact(s): Water level data were collected for well pairs MW-5/5D, MW-8/8D, MW-15/22, and MW-23/24; however, vertical gradients were not calculated or evaluated in the 1995, 1996, and 1997 Evaluation Groundwater Monitoring Program Annual Reports (Annual Reports).
- 3.9. The Department alleges that Respondent violated section 66265.91, subdivision (b), in that on or about March 26, 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, and as required by the 1993 WQSAP, Appendix D, Section 5.1, page 6. This allegation is based on the following fact(s): Respondent did not measure the DTW from well 11-GW-3 on the same day as the other wells. Water level data were collected from well 11-GW-3 on March 31, 1997.
- 3.10. The Department alleges that Respondent violated section 66265.91, subdivision (b), section 66265.73, subdivision (a), and section 66265.97, subdivision (e)(17), in that on or about March 25, 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, by failing to maintain a copy of the operating record at the site, and failing to submit all water quality monitoring data as required by the 1993 WQSAP, Section 5.8.2, 5j, page 20. This allegation is based upon the following

fact(s): The Respondent did not include the Equipment Calibration Logs in the 1996 and 1997 Annual Reports.

- 3.11. The Department alleges that Respondent violated section 66265.91, subdivision (b), and section 66265.97, subdivision (e)(17), in that during the month of March 1996, 1997, and 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6 and failed to submit all water quality monitoring data to DTSC, as required by the 1993 WQSAP, at Section 5.8.2, item 5h, page 20, and Appendix D, Section 11.0, page 13. This allegation is based on the following fact(s): The Respondent did not include all field and laboratory quality control/quality assurance (QA/QC) data in the 1996 and 1997 Annual Reports. Laboratory QA/QC data [e.g., matrix spike and matrix spike duplicate samples for 1997, trip blanks (first quarter 1995) and field blanks (1997)] were not contained in some Annual Reports. Duplicate samples were not analyzed by an outside laboratory in 1997.
- 3.12. The Department alleges that Respondent violated section 66265.91, subdivision (b), and section 66265.97, subdivision (e)(14), in that during the month of March 1996, 1997, and 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, by failing to graph all analytical data from each monitoring/background point and submit these graphs to DTSC at least annually, as required by the 1993 WQSAP, Section 5.8.2, item c, pages 18 and 19. The allegation is based upon the following fact(s): The Respondent did not include time concentration graphs of water level in the 1997 Annual Report, total VOCs in the 1995, 1996, and 1997 Annual Reports, and SVOCs and background data on all graphs in the 1995, 1996, and 1997 Annual Reports.

- 3.13. The Department alleges that Respondent violated section 66265.91, subdivision (b) and section 66265.97, subdivision (e)(14), in that during 1995, 1996, and 1997, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations title 22, division 4.5, chapter 15, article 6, by failing to submit graphs at an appropriate scale to show trends or variations in water quality, as required by the 1993 WQSAP, Section 5.8.2 c, pages 18 and 19, dated May 28, 1993. This allegation is based on the following fact(s): Respondent did not include graphs with a scale for arsenic (30-40 and 60 foot wells), lead (30-40 foot wells), and silver (60 foot wells) in the 1995, 1996, and 1997 Annual Reports, that was equivalent to the scale used for amended graphs submitted in 1998 for 1997 VOC data. The Respondent also did not include graphs with this scale for VOCs and metals in the 1995, 1996, and 1997 Annual Reports; however, amended graphs (VOCs for 1997 data) with appropriate scale were submitted after the submittal date in 1998.

 Additionally, some graphs submitted by the facility did not clearly identify well symbols and some grap did not use an expanded scale for closely plotted data.
- 3.14. The Department alleges that Respondent violated section 66265.91, subdivision (b), in that during the month of March 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6 by failing to comply with requirements contained in the 1993 WQSAP, at Section 5.8.2, item d, page 19. This allegation is based on the following fact(s): Respondent did not include tables summarizing concentrations for those constituents not included in Tables 2A, 2B, or 2C of the 1997 Annual Report. A table for SVOC concentrations was also omitted from the 1997 Annual Report. Additionally, the SVOC laboratory analytical results could not be located in the 1997 Annual Report.

- 3.15. The Department alleges that Respondent violated section 66265.91, subdivision (b) and section 66265.97, subdivision (b)(7), in that throughout 1995, 1996, and 1997, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, and failed to adequately develop all monitoring wells to enable collection of representative samples, as required by the 1993 WQSAP, Section 5.7, page 15. This allegation is based on the following fact(s): Respondent collected groundwater samples containing sediment (e.g., filter pack material) from monitoring well MW-5 and did not develop wells MW-3. MW-5, MW-6, MW-8, MW-9, and MW-11.
- 3.16. The Department alleges that Respondent violated section 66265.91, subdivision (b) and section 66265.99, subdivision (e)(7), in that on or about April 1, 1998, the Respondent failed to follow a water quality sampling and analysis plan that complies with the California Code of Regulations, title 22, division 4.5, chapter 15, article 6, and failed to evaluate all water quality data, including all water level data, to determine the rate and extent of migration of hazardous constituents and to describe the nature of changes in the geochemistry and geometry of the volume affected by the release, as required by the 1993 WQSAP, at Section 5.8.2, pages 19 and 20. This allegation is based upon the following fact(s): Respondent did not evaluate the following in writing:
 - a. water elevation variations and associated water level graphs;
- b. general contaminant trends and migration patterns on graphs and isoconcentration maps; and
- c. the constituents of concern and monitoring parameters in the 1995, 1996, and 1997
 Annual Reports. The 1996 Annual Report copied, verbatim, the 1995 data for vinyl chloride, and the
 1997 Annual Report indicated the highest total chromium concentration historically recorded for well

MW-9 was consistent with past concentrations. The Department contends this means the data was not evaluated per California Code of Regulations, title 22, division 4.5, chapter 15, article 6, and 1993 WQSAP because the highest concentration can not be consistent with past concentrations.

- 3.17. The Department alleges that Respondent violated section 66265.97, subdivisions (e)(5) and (b)(4), in that from March 26, 1998 to March 31, the Respondent failed to establish a groundwater monitoring system capable of accurately measuring the concentration of constituent of concerns and monitoring parameters; the Respondent failed to prevent multiple wells from acting as conduits, thereby preventing accurate measurement of groundwater constituent of concerns and monitoring parameters.

 To wit, the potential exists for surface water to enter certain wells and affect groundwater sample quality. This allegation is based on the following fact(s): Several wells (e.g., MW-3, MW-4, MW-8, MW-32) are prone to flooding. Several wells do not have a well cap that would prevent water from entering the well. Grass was observed on the well sounder tip at well MW-8 on March 26, 1998. Evidence suggesting water entered well MW-3 was also observed on March 26, 1998. The annular wellhead space at well MW-29 was bailed out on March 25, 1998. After a rain event, the well was noted to again have water in the space on March 26, 1998.
- 3.18. The Department alleges Respondent violated section 66265.97, subdivision (e)(13), in that on or about March 25, 1998, the Respondent failed to collect an accurate determination of groundwater surface elevation. This allegation is based on the following fact(s): The depth to water for well MW-24 was misread by one foot.
 - 4. A dispute exists regarding the alleged violations.
 - 5. The parties wish to avoid the expense of litigation and to ensure prompt compliance.
 - 6. Jurisdiction exists pursuant to Health and Safety Code (HSC) Section 25187.

- 7. Respondent waives any right to a hearing in this matter, except to the extent the Department pursues further enforcement for alleged noncompliance with this Consent Order pursuant to paragraph 12.2 below.
- 8. This Consent Order shall constitute full settlement of the violations alleged above, but does not limit the Department from taking appropriate enforcement action concerning other violations.
- 9. By entering into this Consent Order, Respondent does not admit the violations or factual accounts alleged above.

SCHEDULE FOR COMPLIANCE

- 10. Respondent shall comply with the following:
- 10.1. Except as otherwise provided, Respondent shall submit any and all documentation of compliance called for in the individual requirements set forth in Schedule of Compliance, below.
- 10.1.1 Respondent shall comply with the revised and/or approved WQSAP (November 1, 1998, or as subsequently modified) and its provisions. Respondent shall also comply with the requirements of the California Code of Regulations, title 22, chapter 15, article 6. Pursuant to section 66265.99(h), if the Respondent determines that the evaluation monitoring program does not satisfy the requirements of section 66265.99, Respondent shall, within 90 days, submit an amended WQSAP to make any appropriate changes to the program.
- 10.2. <u>Submittals</u>: All submittals from Respondent pursuant to this Consent Order shall be sent simultaneously to:

Carmelita Lampino
Unit Chief
Statewide Compliance Division
Department of Toxic Substances Control
5796 Corporate Avenue

Cypress, California 90630

Alfredo Zanoria, C.E.G. Unit Chief Geological Support Unit Department of Toxic Substances Control 5796 Corporate Avenue Cypress, California 90630

- 10.3. <u>Communications</u>: All approvals and decisions of the Department made regarding such submittals and notifications shall be communicated to Respondent in writing by a Branch Chief, Department of Toxic Substances Control, or his/her designee. No informal advice, guidance, suggestions, or comments by the Department regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of its obligation to obtain such formal approvals as may be required.
- 10.4. <u>Department Review and Approval</u>: If the Department determines that any report, plan, schedule, or other document submitted for approval pursuant to this Consent Order fails to comply with the Order or fails to protect public health or safety or the environment, the Department may return the document to Respondent with recommended changes and a date by which Respondent must submit to the Department a revised document incorporating the recommended changes.
- 10.5. <u>Compliance with Applicable Laws</u>: Respondent shall carry out this Order in compliance with all local, State, and federal requirements, including but not limited to requirements to obtain permi and to assure worker safety.
- 10.6. Endangerment during Implementation: In the event that the Department determines that any circumstances or activity (whether or not pursued in compliance with this Consent Order) are creating an imminent or substantial endangerment to the health or welfare of people on the site or in the